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WINTER HAVEN, FLORIDA 33880

April 30, 1976

DISTRICT OFFICES

1333 NORTH FLORIDA AVE. LAKELAND, FLORIDA 33801

P. O. BOX 33 WAVERLY, FLORIDA 33877

2 NORTH REEDY BLVO.
FROSTRPOOF, FLORIDA 33843

243 E. LAKE AVENUE AUBURNDALE, FLORIDA 33823

Field Report

Barrett, Haentjens & Company Hazleton, Pennsylvania 18201

Dear Sir:

Enclosed you will find a gamma map of BARRETT, HAENTJEN & COMPANY of FLORIDA. The map is comprised of 12 internal gamma radiation readings and 14 external gamma radiation readings. The following is the interim guidelines set forth by the United States Environmental Protection Agency, they have been printed in the Federal Register.

INTERIM RECOMMENDATIONS FOR GAMMA EXPOSURE LEVELS AT NEW STRUCTURED SITES ON FLORIDA PHOSPHATE LANDS

## EXTERNAL GAMMA RADIATION LEVEL

### RECOMMENDATIONS

Equal or greater than 10 uR/hr

Construction should be delayed pending additional study or acceptable control technology should be instituted to preclude indoor radon daughter problems.

Less than 10 uR/hr

Construction may be initiated.

As compared to the guideline, the readings taken at your plant do not meet the  $10~\mathrm{uR/hr}$  radiation level. But I would like to point out that the interim recommendations purpose is to limit radon daughter exposures in structures constructed on Florida phosphate lands.

Radon 222 is a radioactive daughter product of the uranium decay series. It in turn decays into other radioactive elements. The problem arises from the fact that Radon 222 is a gas that decays fairly rapidly and can be inhaled into the lungs. There it decays into radioactive solids, which, if present in large enough quantities can become cancer causative agents.



Although your plant has elevated gamma readings it is doubtful that you would have a large buildup of Radon 222 in your plant due to its construction.

I am making reference to the large entrances at both ends of your plant. These large openings should provide more than adequate ventilation for a structure of this size. We are in the process of obtaining equipment which will measure the amount of Radon present in a structure. This equipment should arrive later this summer. At that time we would be glad to further our investigation of your plant for you.

I would also like to point out that the recommendations set forth by the EPA are interim and a final report and regulations should be forth coming by the end of 1976.

Sincerely

Harlan Keaton Industrial Hygienist II

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| TOWN VISITED Mulberry - Highway 60 West DATE April 19, 1976  OWNER OF PROPERTY Barrett, Haentjens & Co. Hazleton, PERSON SEEN E. Diaz  BY WHOM Harlan Keaton and Lee Forgey TIME SPENT 2 hours  REASON FOR VISIT Make gamma map of company built on reclaimed phosphate land.  REPORT: NO. uR /hr  Column A 1 - 10.0 Readings 1-12 were all taken inside the building numbered 2 - 10.0 Reading No. 8 may be elevated due to its closene to the edge of the slab. (Compare reading No. 8 to reading No. 21 with 21 being outside the structumbered on 5 - 9.9 ture and off the slab but having a close proximitate the attached 6 - 11.9 to No. 8). All other readings were taken outside the building. Note at position 18 there were leading at 10 - 9.5 the building. Note at position 18 there were leadings at 10 - 9.5 these positions 11 - 10.4 the building and may be in an area that has not disturbed by mining operations.  |
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| OWNER OF PROPERTY Barrett, |                    | PA            | SON SEEN E.   | Diaz      |
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| FIELD REPORT ON BANKETTY KOCK TYENS            | Co. of Horian              |
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| REASON FOR VISIT MAKE GAMMA MAP OF             | Company built on Reclaimed |
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| 23. 32.9 | 31.42          | •          | Hn,                                   | 1,3              | 31.6   |
| 24. 34.1 | 33,1/8         | 18/20      | Hn.                                   | .6               | 33,5   |
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